Date: 28.02.2023

No. SH/PMC/BBMP/ BD / / 2023-24

To,
The Executive Engineer
Byatarayanapura Division,
Bruhat Bangalore Mahanagara Palike,

Dear Sir,

Sub: (Package No. 2 Consists of 5 Works) Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

In reference to the above subject, this is to bring to your kind notice that we have scrutinized the **Second and Part bill** submitted by **M/s Sri Venkateshwara Constructions, Prop . Sri Sambashiva** towards the above said work and arrived at an amount of **Rs. 16,609,560.00 /-(Rupees One Crores Sixty Six Lakhs Nine Thousand Five Hundred And Sixty Rupees Only**). This work has been completed satisfactorily.

This is for your kind information.

Thank you and assuring you the best of our Services at all the times.

For M/s Shiprama Consulting Engineers Pvt Ltd Bangalore

DIRECTOR

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Name of the work: (Package No. 2 Consists of 5 Works) Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Contractor/Agency : M/s Sri Venkateshwara Constructions, Prop . Sri Sambashiva

Name of the Client : BBMP

Estimated Cost : 1000.00 Lakhs

Status of Bill : 2nd and Part Bill.

In the Presence of :(a) Assistant Engineer,
BBMP, Bangalore.

:(b) Rohith K N Engineer
M/s Shiprama Consulting Engineers Pvt Ltd Bangalore.

Item No.	Description of Item	Comments/observation
1	Removing & Resetting of foothpath slab/drain slab	Work done up to the billed quantity and quality is satisfactory
2	Removing and resetting of kerb stones	Work done up to the billed quantity and quality is satisfactory
3	Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)	Work done up to the billed quantity and quality is satisfactory

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ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

4	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work ((V-I, P.No-8, I No-1.12 of PWD SR 2021-22)	Work done up to the billed quantity and quality is satisfactory
5	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).	Work done up to the billed quantity and quality is satisfactory
6	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))	Work done up to the billed quantity and quality is satisfactory
7	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))	Work done up to the billed quantity and quality is satisfactory
8	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))	Work done up to the billed quantity and quality is satisfactory
9	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))	Work done up to the billed quantity and quality is satisfactory

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-24

10	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).	Work done up to the billed quantity and quality is satisfactory
11	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate	Work done up to the billed quantity and quality is satisfactory
12	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (Approved Rate)	Work done up to the billed quantity and quality is satisfactory
13	Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22	Work done up to the billed quantity and quality is satisfactory

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

For M/s Shiprama Consulting Engineers Pvt Ltd Bangalore

SHIPRAMA Consulting Engineers Pvt. Ltd. Bangalore

DIRECTOR

TEST REPORT ON KERB STONE

Date. : 16-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** :M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name :Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Kerb Stone - M20

Date of Reciept of Sample : 16-12-2022

Date of testing : 16-12-2022

TEST RESULTS

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	76.50	0.386	2569.78	1.53	0.960	32.42	16.51	17.83	17.12	21.40
2	50.00	78.50	0.398	2582.162	1.57	0.960	33.51	17.07	18.43	17.69	22.12
3	50.00	81.00	0.411	2584.205	1.62	0.960	34.22	17.43	18.82	18.07	22.59

* Data specified by Contractor.

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON PRECAST SLAB

Date. : 16-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** :M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name :Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Precast Slab 100mm thick

Date of Reciept of Sample :16-12-2022

Date of testing : 16-12-2022

TEST RESULTS

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	85.00	0.416	2492.554	1.70	0.960	26.63	13.56	13.97	13.41	16.76
2	50.00	80.00	0.417	2654.704	1.60	0.960	27.76	14.14	14.56	13.98	17.47
3	50.00	75.00	0.395	2682.291	1.50	0.960	28.81	14.67	15.11	14.51	18.14

* Data specified by Contractor.

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-26

TEST REPORT ON AGGREGATE IMPACT VALUE OF WET MIX MACADAM

Date. : 20-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13
Material description : Wet Mix Macadam
Date of Reciept of Sample : 20-12-2022
Date of testing : 20-12-2022

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	374	383	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	85	83	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	291	299	
4	Aggregate Impact value = percent fines	22.08	22.19	21.93	
	100* (W_2/W_1)%				22.07

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
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TEST REPORT ON GRADATION OF WET MIX MACADAM

Date.	: 20-12-20222
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	:EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13
Material description	: Wet Mix Macadam
Date of Reciept of Sample	: 20-12-20222
Date of testing	: 20-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	518	518	3.02	96.98	95-100
22.4	3542	4060	23.71	76.29	60-80
11.2	3165	7225	42.19	57.81	40-60
4.75	3621	10846	63.33	36.67	25-40
2.36	2859	13705	80.03	19.97	15-30
0.6	1540	15245	89.02	10.98	8-22
0.075	1652	16897	98.67	1.33	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಬಿ.ಬಿ.ಎಂ.ಪಿ.

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ಬಿ.ಬಿ.ಎಂ.ಪಿ.

TEST REPORT ON GRADATION OF WET MIX MACADAM

Date.	: 20-12-20222
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13
Material description	: Wet Mix Macadam
Date of Reciept of Sample	: 20-12-20222
Date of testing	: 20-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	520	520	3.04	96.96	95-100
22.4	3586	4106	23.98	76.02	60-80
11.2	3193	7299	42.62	57.38	40-60
4.75	3675	10974	64.08	35.92	25-40
2.36	2924	13898	81.16	18.84	15-30
0.6	1652	15550	90.80	9.20	8-22
0.075	1458	17008	99.32	0.68	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಧಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು-24

SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
(MECHANICAL TESTING LABORATORY DIVISION)
ISO 9001:2015 Certified Company

TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 20-12-20222

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample : 20-12-20222

Date of testing : 20-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	525	525	3.07	96.93	95-100
22.4	3753	4278	24.98	75.02	60-80
11.2	3456	7734	45.16	54.84	40-60
4.75	3785	11519	67.26	32.74	25-40
2.36	2971	14490	84.61	15.39	15-30
0.6	1099	15589	91.03	8.97	8-22
0.075	1410	16999	99.26	0.74	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

1048, 8th Block Extension ,Gangubai Hangal Road, Sir M. Vishveshwaraiah Layout, Near Gidadakonenahalli
Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 21-12-20222

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13
Material description : Wet Mix Macadam
Date of Reciept of Sample : 21-12-20222
Date of testing : 21-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	528	528	3.08	96.92	95-100
22.4	3685	4213	24.60	75.40	60-80
11.2	3278	7491	43.74	56.26	40-60
4.75	3535	11026	64.39	35.61	25-40
2.36	2769	13795	80.55	19.45	15-30
0.6	1511	15306	89.38	10.62	8-22
0.075	1560	16866	98.49	1.51	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
(MECHANICAL TESTING LABORATORY DIVISION)
ISO 9001:2015 Certified Company

TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 21-12-20222

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample : 21-12-20222

Date of testing : 21-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	530	530	3.09	96.91	95-100
22.4	3783	4313	25.19	74.81	60-80
11.2	3144	7457	43.54	56.46	40-60
4.75	3565	11022	64.36	35.64	25-40
2.36	2742	13764	80.37	19.63	15-30
0.6	1603	15367	89.73	10.27	8-22
0.075	1674	17041	99.51	0.49	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-24

1048, 8th Block Extension ,Gangubai Hangal Road, Sir M. Vishveshwaraiah Layout, Near Gidadakonenahalli
Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 21-12-20222

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13
Material description : Wet Mix Macadam
Date of Reciept of Sample : 21-12-20222
Date of testing : 21-12-20222

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	531	531	3.10	96.90	95-100
22.4	3574	4105	23.97	76.03	60-80
11.2	3189	7294	42.59	57.41	40-60
4.75	3720	11014	64.32	35.68	25-40
2.36	2809	13823	80.72	19.28	15-30
0.6	1615	15438	90.15	9.85	8-22
0.075	1550	16988	99.20	0.80	0-5

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date.	: 20-12-2022
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12
Material description	: Wet Mix Macadam
Date of Reciept of Sample	: 20-12-2022
Date of testing	: 20-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	15.25%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	11.30%	
	Combined Flakiness & Elongation	**26.55%**	

* Data specified by Contractor.

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date. : 20-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12
Material description : Wet Mix Macadam
Date of Reciept of Sample : 20-12-2022
Date of testing : 20-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	15.00%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	12.15%	
	Combined Flakiness & Elongation	**27.15%**	

* Data specified by Contractor.

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date.	: 21-12-2022
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12
Material description	: Wet Mix Macadam
Date of Reciept of Sample	: 21-12-2022
Date of testing	: 21-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	15.40%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	11.35%	
	Combined Flakiness & Elongation	**26.75%**	

* Data specified by Contractor.

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date.	: 21-12-2022
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12
Material description	: Wet Mix Macadam
Date of Reciept of Sample	: 21-12-2022
Date of testing	: 21-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	16.60%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	12.30%	
	Combined Flakiness & Elongation	**28.90%**	

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
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TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date.	:20-12-2022
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13
Material description	: Wet Mix Macadam
Date of Reciept of Sample	:20-12-2022
Date of testing	:20-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	23.75	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. :20-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample :20-12-2022

Date of testing :20-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.45	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. :20-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers.

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample :20-12-2022

Date of testing :20-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	23.65	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. : 21-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample : 21-12-2022

Date of testing : 21-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.25	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. : 21-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample : 21-12-2022

Date of testing : 21-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.65	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. : 21-12-2022

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Material description : Wet Mix Macadam

Date of Reciept of Sample : 21-12-2022

Date of testing : 21-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	23.50	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 06-02-2023
Date of testing : 06-02-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	390	391	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	90	89	91	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	302	298	
4	Aggregate Impact value = percent fines	23.08	22.76	23.39	
	100* (W_2/W_1)%				**23.08**

* Data specified by Contractor.

Remarks : Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27%

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 21-01-2023
Date of testing : 21-01-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	384	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	92	90	91	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	297	294	294	
4	Aggregate Impact value = percent fines	23.65	23.44	23.64	
	100* (W_2/W_1)%				**23.57**

* Data specified by Contractor.

Remarks : Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27%

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 01-02-2023
Date of testing : 01-02-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	390	389	387	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	91	89	88	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	299	300	299	
4	Aggregate Impact value = percent fines	23.33	22.88	22.74	
	100* (W_2/W_1)%				22.98

* Data specified by Contractor.

Remarks : Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27%

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TEST REPORT ON GRADATION

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
Location : Hegadenagara Western Side
Source of Sample : At Site
Technical Reference : IS 2720 (Part-4)- 1985 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 21-01-2023
Date of testing : 21-01-2023

TEST RESULTS

Total Wt. of Aggregates in gms 13124

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	495	495	3.77	96.23	90 - 100
19	2361	2856	21.76	78.24	71 - 95
13.2	2569	5425	41.34	58.66	56 - 80
4.75	2648	8073	61.51	38.49	38 - 54
2.36	1385	9458	72.07	27.93	28 - 42
0.3	2390	11848	90.28	9.72	7 - 21
0.075	644	12492	95.18	4.82	2 - 8

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-10, Grading II

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***** End of the Report *****

TEST REPORT ON GRADATION

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2016, MORTH Table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

Total Wt. of Aggregates in gms 13124

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	493	493	3.76	96.24	90 - 100
19	2351	2844	21.67	78.33	71 - 95
13.2	2570	5414	41.25	58.75	56 - 80
4.75	2651	8065	61.45	38.55	38 - 54
2.36	1389	9454	72.04	27.96	28 - 42
0.3	2391	11845	90.25	9.75	7 - 21
0.075	646	12491	95.18	4.82	2 - 8

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-10, Grading II

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TEST REPORT ON GRADATION

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
Location : Hegadenagara Western Side
Source of Sample : At Site
Technical Reference : IS 2720 (Part-4)- 1985 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 06-02-2023
Date of testing : 06-02-2023

TEST RESULTS

Total Wt. of Aggregates in gms 13124

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	496	496	3.78	96.22	90 - 100
19	2359	2855	21.75	78.25	71 - 95
13.2	2572	5427	41.35	58.65	56 - 80
4.75	2653	8080	61.57	38.43	38 - 54
2.36	1391	9471	72.17	27.83	28 - 42
0.3	2395	11866	90.41	9.59	7 - 21
0.075	646	12512	95.34	4.66	2 - 8

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-10, Grading II

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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR DENSE GRADED BITUMINOUS MACADAM

Date. : 22-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 22-01-2023

Date of testing : 22-01-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	476.5	477.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	23.5	22.50
7. Bitumen content in %	4.70	4.50
8. Average	4.60	

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Total Wt. of Aggregates in gms 476.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	32.4	32.4	6.80	93.20	90 - 100
19	51.2	83.6	17.54	82.46	71 - 95
13.2	36.9	120.5	25.29	74.71	56 - 80
4.75	125.2	245.7	51.56	48.44	38 - 54
2.36	68.5	314.2	65.94	34.06	28 - 42
0.3	85.9	400.1	83.97	16.03	7 - 21
0.075	48.5	448.6	94.14	5.86	2 - 8

Total Wt. of Aggregates in gms 477.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	33.4	33.4	6.99	93.01	90 - 100
19	58.6	92	19.27	80.73	71 - 95
13.2	36.2	128.2	26.85	73.15	56 - 80
4.75	129.6	257.8	53.99	46.01	38 - 54
2.36	62.9	320.7	67.16	32.84	28 - 42
0.3	82.4	403.1	84.42	15.58	7 - 21
0.075	53.6	456.7	95.64	4.36	2 - 8

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR DENSE GRADED BITUMINOUS MACADAM

Date. : 02-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 02-02-2023

Date of testing : 02-02-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	477	476.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	23	23.50
7. Bitumen content in %	4.60	4.70
8. Average	4.65	

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Total Wt. of Aggregates in gms 477

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	31.5	31.5	6.60	93.40	90 - 100
19	52.2	83.7	17.55	82.45	71 - 95
13.2	35.9	119.6	25.07	74.93	56 - 80
4.75	125.6	245.2	51.40	48.60	38 - 54
2.36	68.4	313.6	65.74	34.26	28 - 42
0.3	85.6	399.2	83.69	16.31	7 - 21
0.075	48.4	447.6	93.84	6.16	2 - 8

Total Wt. of Aggregates in gms 476.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	32.6	32.6	6.84	93.16	90 - 100
19	59.6	92.2	19.35	80.65	71 - 95
13.2	36.5	128.7	27.01	72.99	56 - 80
4.75	129.8	258.5	54.25	45.75	38 - 54
2.36	64.5	323	67.79	32.21	28 - 42
0.3	83.5	406.5	85.31	14.69	7 - 21
0.075	54.4	460.9	96.73	3.27	2 - 8

* Data specified by Contractor.

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TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR DENSE GRADED BITUMINOUS MACADAM

Date. : 07-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 07-02-2023

Date of testing : 07-02-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	478	476.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	22	23.50
7. Bitumen content in %	4.40	4.70
8. Average	**4.55**	

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

Total Wt. of Aggregates in gms 478

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	34.3	34.3	7.18	92.82	90 - 100
19	55.2	89.5	18.72	81.28	71 - 95
13.2	34.9	124.4	26.03	73.97	56 - 80
4.75	125.2	249.6	52.22	47.78	38 - 54
2.36	68.4	318	66.53	33.47	28 - 42
0.3	85.7	403.7	84.46	15.54	7 - 21
0.075	48.5	452.2	94.60	5.40	2 - 8

Total Wt. of Aggregates in gms 476.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	35.6	35.6	7.47	92.53	90 - 100
19	58.6	94.2	19.77	80.23	71 - 95
13.2	36.5	130.7	27.43	72.57	56 - 80
4.75	127.8	258.5	54.25	45.75	38 - 54
2.36	64.5	323	67.79	32.21	28 - 42
0.3	85.5	408.5	85.73	14.27	7 - 21
0.075	56.4	464.9	97.57	2.43	2 - 8

* Data specified by Contractor.

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON FLAKINESS & ELONGATION

Date.	: 21-01-2023
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	:EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-13
Material description	: Dense graded Bituminous Macadam
Date of Reciept of Sample	: 21-01-2023
Date of testing	: 21-01-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Flakiness Index	16.00%	Maximum allowable Flakiness & Elongat Dense graded Bituminous Macadam is 35%
2	Elongation Index	11.45%	
	Combined Flakiness & Elongation	**27.45%**	

* Data specified by Contractor.

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SHIPRAMA Consulting Engineers Pvt. Ltd. Bangalore

***** End of the Report *****

TEST REPORT ON FLAKINESS & ELONGATION

Date.	: 01-02-2023
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	:EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-13
Material description	: Dense graded Bituminous Macadam
Date of Reciept of Sample	: 01-02-2023
Date of testing	: 01-02-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Flakiness Index	16.35%	Maximum allowable Flakiness & Elongat Dense graded Bituminous Macadam is 35%
2	Elongation Index	11.10%	
	Combined Flakiness & Elongation	**27.45%**	

* Data specified by Contractor.

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ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON FLAKINESS & ELONGATION

Date.	: 06-02-2023
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	:EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 400-13
Material description	: Dense graded Bituminous Macadam
Date of Reciept of Sample	: 06-02-2023
Date of testing	: 06-02-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Flakiness Index	15.95%	Maximum allowable Flakiness & Elongat Dense graded Bituminous Macadam is 35%
2	Elongation Index	11.50%	
	Combined Flakiness & Elongation	**27.45%**	

* Data specified by Contractor.

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TEST REPORT ON BITUMEN

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample : 21-01-2023

Date of testing : 21-01-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Dense Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	57	Min 45
2	Softening point, ^{0}C	49	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	364	Min. 220

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON BITUMEN

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Dense Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	59	Min 45
2	Softening point, ^{0}C	48	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	361	Min. 220

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON BITUMEN

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample : 06-02-2023

Date of testing : 06-02-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Dense Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	58	Min 45
2	Softening point, ^{0}C	47	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	360	Min. 220

* Data specified by Contractor.

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 21-01-2023
Date of testing : 21-01-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3722.0	3723.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2475.0	2473.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1247.0	1250.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2008
5	Weight of oven dry Aggregate (in gms)	C	1997.0	1998.0

Result :	1. Specific gravity = (C/B-A)	2.63	2.64
	2. Water Absorption in Percentage = (B-C*100/C)	0.50	0.50

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%

Notes:-

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ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 01-02-2023
Date of testing : 01-02-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3724.0	3725.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2474.0	2473.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1250.0	1252.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2008
5	Weight of oven dry Aggregate (in gms)	C	1997.0	1998.0

Result :	1. Specific gravity = (C/B-A)	2.64	2.64
	2. Water Absorption in Percentage = (B-C*100/C)	0.50	0.50

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿಟಿರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು-24

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample : 06-02-2023
Date of testing : 06-02-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3725.0	3722.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2475.0	2473.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1250.0	1249.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2008
5	Weight of oven dry Aggregate (in gms)	C	1996.5	1998.0

Result :	1. Specific gravity = (C/B-A)	2.64	2.63
	2. Water Absorption in Percentage = (B-C*100/C)	0.53	0.50

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%

Notes:-

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*** End of the Report ***

DETERMINATION OF RATE OF SPREAD PRIME COAT

Date. : 21-01-2023

***Client Name** : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

Contractor Name : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Buliet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing : 21-01-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2024	0.2024
Intial Wt of empty Plate (b)	Kg	1.629	1.629
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.768	1.768
Weight of Prime/Tack Coat (d=c-b)	Kg	0.1390	0.1390
Rate of spread of prime /tack coat	kg/Sq.m	0.687	0.687
Average	kg/Sq.m	0.687	
Specified Limit	kg/Sq.m	0.60 Kg/sq.m	

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ಸಮಾಯಕ ಅಧಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

DETERMINATION OF RATE OF SPREAD PRIME COAT

Date. : 01-02-2023

***Client Name** : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

Contractor Name : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing : 01-02-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2025	0.2025
Intial Wt of empty Plate (b)	Kg	1.629	1.629
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.768	1.768
Weight of Prime/Tack Coat (d=c-b)	Kg	0.1390	0.1390
Rate of spread of prime /tack coat	kg/Sq.m	0.686	0.686
Average	kg/Sq.m	0.686	
Specified Limit	kg/Sq.m	0.60 Kg/sq.m	

Notes:-

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

DETERMINATION OF RATE OF SPREAD PRIME COAT

Date. : 06-02-2023

***Client Name** : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

Contractor Name : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing : 06-02-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2023	0.2024
Intial Wt of empty Plate (b)	Kg	1.629	1.629
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.768	1.768
Weight of Prime/Tack Coat (d=c-b)	Kg	0.1390	0.1390
Rate of spread of prime /tack coat	kg/Sq.m	0.687	0.687
Average	kg/Sq.m	0.687	
Specified Limit	kg/Sq.m	0.60 Kg/sq.m	

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON STABILITY OF MIX

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-11

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 21-01-2023

Date of testing : 21-01-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH (Table 500-11)
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.95	9.75	9 Kn (min)
2	Marshal flow, mm	2.64	2.72	2 – 4
3	Percent air voids in Mix	3.63	3.85	3 – 5
4	Percent voids in mineral aggregates	11.73	11.61	10-12
5	Percent voids filled with Bitumen	70.11	70.26	65 – 75
6	Density, g/cc	2.25	2.27	-

* Data specified by Contractor.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
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TEST REPORT ON STABILITY OF MIX

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-11

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH (Table 500-11)
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.89	9.71	9 Kn (min)
2	Marshal flow, mm	2.66	2.75	2 – 4
3	Percent air voids in Mix	3.64	3.84	3 – 5
4	Percent voids in mineral aggregates	11.72	11.59	10-12
5	Percent voids filled with Bitumen	70.19	70.3	65 – 75
6	Density, g/cc	2.26	2.27	-

* Data specified by Contractor.

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TEST REPORT ON STABILITY OF MIX

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Hegadenagara Western Side

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-11

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 06-02-2023

Date of testing : 06-02-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH (Table 500-11)
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.85	9.89	9 Kn (min)
2	Marshal flow, mm	2.59	2.73	2 – 4
3	Percent air voids in Mix	3.64	3.84	3 – 5
4	Percent voids in mineral aggregates	11.74	11.69	10-12
5	Percent voids filled with Bitumen	70.15	70.28	65 – 75
6	Density, g/cc	2.24	2.26	-

* Data specified by Contractor.

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TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR BITUMINOUS CONCRETE

Date. : 02-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Shankara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH
Material description : Bituminous Concrete
Date of Reciept of Sample : 02-02-2023
Date of testing : 02-02-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	470.5	469
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	29.50	31.00
7. Bitumen content in %	5.90	6.20
8. Average	6.05	

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Total Wt. of Aggregates in gms 470.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	30.3	30.3	6.44	93.56	90- 100
9.5	65.1	95.4	20.28	79.72	70 - 88
4.75	83.5	178.9	38.02	61.98	53 - 71
2.36	58.3	237.2	50.41	49.59	42 - 58
1.18	43.2	280.4	59.60	40.40	34 - 48
0.6	26.5	306.9	65.23	34.77	26 - 38
0.3	49.7	356.6	75.79	24.21	18 - 28
0.15	36.2	392.8	83.49	16.51	12 - 20
0.075	45.2	438	93.09	6.91	4 - 10

Total Wt. of Aggregates in gms 469

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	32.2	32.2	6.87	93.13	90- 100
9.5	45.5	77.7	16.57	83.43	70 - 88
4.75	86.6	164.3	35.03	64.97	53 - 71
2.36	65.4	229.7	48.98	51.02	42 - 58
1.18	79.9	309.6	66.01	33.99	34 - 48
0.6	28.6	338.2	72.11	27.89	26 - 38
0.3	35.4	373.6	79.66	20.34	18 - 28
0.15	23.8	397.4	84.73	15.27	12 - 20
0.075	59.3	456.7	97.38	2.62	4 - 10

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR BITUMINOUS CONCRETE

Date. : 22-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Shankara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH
Material description : Bituminous Concrete
Date of Reciept of Sample : 22-01-2023
Date of testing : 22-01-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	468	472
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	32.00	28.00
7. Bitumen content in %	6.40	5.60
8. Average	6.00	

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

Total Wt. of Aggregates in gms 468

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	30.5	30.5	6.52	93.48	90- 100
9.5	65.4	95.9	20.49	79.51	70 - 88
4.75	92.6	188.5	40.28	59.72	53 - 71
2.36	81.5	270	57.69	42.31	42 - 58
1.18	37.7	307.7	65.75	34.25	34 - 48
0.6	27.9	335.6	71.71	28.29	26 - 38
0.3	41.1	376.7	80.49	19.51	18 - 28
0.15	27.5	404.2	86.37	13.63	12 - 20
0.075	36.4	440.6	94.15	5.85	4 - 10

Total Wt. of Aggregates in gms 472

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	33.5	33.5	7.10	92.90	90- 100
9.5	46.6	80.1	16.97	83.03	70 - 88
4.75	85.7	165.8	35.13	64.87	53 - 71
2.36	72.6	238.4	50.51	49.49	42 - 58
1.18	67.8	306.2	64.87	35.13	34 - 48
0.6	35.1	341.3	72.31	27.69	26 - 38
0.3	34.7	376	79.66	20.34	18 - 28
0.15	30.6	406.6	86.14	13.86	12 - 20
0.075	36.7	443.3	93.92	6.08	4 - 10

* Data specified by Contractor.

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TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR BITUMINOUS CONCRETE

Date. : 07-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Bituminous Concrete

Date of Reciept of Sample : 07-01-2023

Date of testing : 07-01-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	468.5	472.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	31.50	27.50
7. Bitumen content in %	6.30	5.50
8. Average	5.90	

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
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ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-24

Total Wt. of Aggregates in gms 468.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	31.5	31.5	6.72	93.28	90- 100
9.5	64.4	95.9	20.47	79.53	70 - 88
4.75	93.6	189.5	40.45	59.55	53 - 71
2.36	84.5	274	58.48	41.52	42 - 58
1.18	38.7	312.7	66.74	33.26	34 - 48
0.6	26.9	339.6	72.49	27.51	26 - 38
0.3	42.1	381.7	81.47	18.53	18 - 28
0.15	26.5	408.2	87.13	12.87	12 - 20
0.075	36.5	444.7	94.92	5.08	4 - 10

Total Wt. of Aggregates in gms 472.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	32.5	32.5	6.88	93.12	90- 100
9.5	45.6	78.1	16.53	83.47	70 - 88
4.75	86.7	164.8	34.88	65.12	53 - 71
2.36	71.6	236.4	50.03	49.97	42 - 58
1.18	66.8	303.2	64.17	35.83	34 - 48
0.6	33.1	336.3	71.17	28.83	26 - 38
0.3	36.7	373	78.94	21.06	18 - 28
0.15	32.6	405.6	85.84	14.16	12 - 20
0.075	35.7	441.3	93.40	6.60	4 - 10

* Data specified by Contractor.

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1048, 8th Block Extension ,Gangubai Hangal Road, Sir M. Vishveshwaraiah Layout, Near Gidadakonenahalli
Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample : 21-01-2023
Date of testing : 21-01-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	379	374	377	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	84	82	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	295	292	296	
4	Aggregate Impact value = percent fines	22.16	21.93	21.49	
	100* (W_2/W_1)%				21.86

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate impact value for Bituminous Concrete is 24%

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-24

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample : 01-02-2023
Date of testing : 01-02-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	372	375	378	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	83	85	80	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	289	290	298	
4	Aggregate Impact value = percent fines	22.31	22.67	21.16	
	100* (W_2/W_1)%				22.05

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate impact value for Bituminous Concrete is 24%

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample : 06-02-2023
Date of testing : 06-02-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	373	374	376	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	82	84	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	291	290	295	
4	Aggregate Impact value = percent fines	21.98	22.46	21.54	
	100* (W_2/W_1)%				22.00

* Data specified by Contractor.

Remarks: Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

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ಬಿಬಿಎಂಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು-28

SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
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ISO 9001:2015 Certified Company

TEST REPORT ON FLAKINESS & ELONGATION

Date.	: 21-01-2023
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
*Contractor Name	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	: EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 500-17
Material description	: Bituminous Concrete
Date of Reciept of Sample	: 21-01-2023
Date of testing	: 21-01-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 500-17
1	Flakiness Index	16.50%	Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%
2	Elongation Index	11.55%	
	Combined Flakiness & Elongation	**28.05%**	

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬೆಂಗಳೂರು-೨೬

1048, 8th Block Extension ,Gangubai Hangal Road, Sir M. Vishveshwaraiah Layout, Near Gidadakonenahalli
Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON FLAKINESS & ELONGATION

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 500-17
1	Flakiness Index	16.00%	Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%
2	Elongation Index	11.15%	
	Combined Flakiness & Elongation	**27.15%**	

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON FLAKINESS & ELONGATION

Date.	: 06-02-2023
Client Name	: Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92
***Contractor Name**	: M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.281st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name	: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.
Letter Reference	: EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name	: Shiprama Consulting Engineers
Technical Reference	: IS:2386(part 1)-1963 RA 2016, MORTH Table 500-17
Material description	: Bituminous Concrete
Date of Reciept of Sample	: 06-02-2023
Date of testing	: 06-02-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 500-17
1	Flakiness Index	15.50%	Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%
2	Elongation Index	11.20%	
	Combined Flakiness & Elongation	**26.70%**	

* Data specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

TEST REPORT ON GRADATION

Date. :21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,SahakaraNagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample :21-01-2023
Date of testing :21-01-2023

TEST RESULTS

Total Wt. of Aggregates in gms 5100

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	218	218	4.27	95.73	90- 100
9.5	725	943	18.49	81.51	70 - 88
4.75	856	1799	35.27	64.73	53 - 71
2.36	419	2218	43.49	56.51	42 - 58
1.18	528	2746	53.84	46.16	34 - 48
0.6	550	3296	64.63	35.37	26 - 38
0.3	442	3738	73.29	26.71	18 - 28
0.15	490	4228	82.90	17.10	12 - 20
0.075	451	4679	91.75	8.25	4 - 10

* Data Specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ

TEST REPORT ON GRADATION

Date. :01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample :01-02-2023
Date of testing :01-02-2023

TEST RESULTS

Total Wt. of Aggregates in gms 5100

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	220	220	4.31	95.69	90- 100
9.5	730	950	18.63	81.37	70 - 88
4.75	855	1805	35.39	64.61	53 - 71
2.36	430	2235	43.82	56.18	42 - 58
1.18	519	2754	54.00	46.00	34 - 48
0.6	536	3290	64.51	35.49	26 - 38
0.3	445	3735	73.24	26.76	18 - 28
0.15	455	4190	82.16	17.84	12 - 20
0.075	453	4643	91.04	8.96	4 - 10

* Data Specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

Notes:-
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ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON GRADATION

Date. :06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample :06-02-2023
Date of testing :06-02-2023

TEST RESULTS

Total Wt. of Aggregates in gms 5100

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	221	221	4.33	95.67	90- 100
9.5	729	950	18.63	81.37	70 - 88
4.75	859	1809	35.47	64.53	53 - 71
2.36	435	2244	44.00	56.00	42 - 58
1.18	517	2761	54.14	45.86	34 - 48
0.6	537	3298	64.67	35.33	26 - 38
0.3	449	3747	73.47	26.53	18 - 28
0.15	456	4203	82.41	17.59	12 - 20
0.075	454	4657	91.31	8.69	4 - 10

* Data Specified by Contractor.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ದ್ಯಾಮರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-21

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** :M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name :Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 21-01-2023

Date of testing : 21-01-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3736.0	3735.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2455.0	2467.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1281.0	1268.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2008	2009
5	Weight of oven dry Aggregate (in gms)	C	1999.0	1998.0

Result :	1. Specific gravity = (C/B-A)	2.75	2.70
	2. Water Absorption in Percentage = (B-C*100/C)	0.45	0.55

* Data specified by Contractor

Remarks: Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

Notes:-

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ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

*** End of the Report ***

SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
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ISO 9001:2015 Certified Company

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** :M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name :Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3737.0	3736.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2454.0	2463.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1283.0	1273.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2006	2007
5	Weight of oven dry Aggregate (in gms)	C	1998.0	1999.0

Result :	1. Specific gravity = (C/B-A)	2.76	2.72
	2. Water Absorption in Percentage = (B-C*100/C)	0.40	0.40

* Data specified by Contractor

SHIPRAMA Consulting Engineers Pvt. Ltd. Bangalore

Remarks: Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

*** End of the Report ***

1048, 8th Block Extension ,Gangubai Hangal Road, Sir M. Vishveshwaraiah Layout, Near Gidadakonenahalli
Bengaluru-560091.Mob:9886212878 Ph.: 080 29554444 | Email: shiprama888@gmail.com |

TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** :M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name :Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference :EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 06-02-2023

Date of testing : 06-02-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3735.0	3734.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2457.0	2465.0
3	Weight of Saturarted aggregate in water (in gms) = (A1-A2)	A	1278.0	1269.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2008
5	Weight of oven dry Aggregate (in gms)	C	1998.5	1999.0

Result : 1. Specific gravity = (C/B-A) 2.74 2.71

2. Water Absorption in Percentage = (B-C*100/C) 0.43 0.45

* Data specified by Contractor

Remarks: Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

SHIPRAMA Consulting Engineers Pvt. Ltd. Bangalore

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ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ
ಬೆಂಗಳೂರು-24

TEST REPORT ON BITUMEN

Date. :21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample :21-01-2023

Date of testing :21-01-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Bituminous Concrete

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	58	Min 45
2	Softening point, ^{0}C	49	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	365	Min. 220

* Data specified by Contractor.

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ಸಹಾಯಕ ಅಧಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON BITUMEN

Date. :01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample :01-02-2023

Date of testing :01-02-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Bituminous Concrete

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	56	Min 45
2	Softening point, ^{0}C	47	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	362	Min. 220

* Data specified by Contractor.

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON BITUMEN

Date. :06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name :Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Reciept of Sample :06-02-2023

Date of testing :06-02-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Bituminous Concrete

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	57	Min 45
2	Softening point, ^{0}C	48	Min. 47
3	Ductility at 27^{0}C, cm	> 100	Min. 40
4	Flash Point, ^{0}C	363	Min. 220

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯ... ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON STABILITY OF MIX

Date. : 21-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 21-01-2023

Date of testing : 21-01-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.81	10.16	9 Kn (min)
2	Marshal flow, mm	2.56	2.47	2 – 4
3	Percent air voids in Mix	12.13	12.51	11 – 13
4	Percent voids in mineral aggregates	4.35	4.18	3 – 5
5	Percent voids filled with Bitumen	69.79	69.53	65 - 75
6	Density, g/cc	2.24	2.26	-

* Data specified by Contractor.

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TEST REPORT ON STABILITY OF MIX

Date. : 01-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 01-02-2023

Date of testing : 01-02-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.83	10.11	9 Kn (min)
2	Marshal flow, mm	2.55	2.25	2 – 4
3	Percent air voids in Mix	12.19	12.54	11 – 13
4	Percent voids in mineral aggregates	4.34	4.16	3 – 5
5	Percent voids filled with Bitumen	68.44	69.53	65 - 75
6	Density, g/cc	2.23	2.25	-

* Data specified by Contractor.

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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

SHIPRAMA Consulting Engineers Pvt. Ltd. Bangalore

TEST REPORT ON STABILITY OF MIX

Date. : 06-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura,Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-17

Material description : Bituminous Concrete

Date of Reciept of Sample : 06-02-2023

Date of testing : 06-02-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.85	10.19	9 Kn (min)
2	Marshal flow, mm	2.5	2.27	2 – 4
3	Percent air voids in Mix	12.15	12.58	11 – 13
4	Percent voids in mineral aggregates	4.35	4.17	3 – 5
5	Percent voids filled with Bitumen	68.45	69.54	65 - 75
6	Density, g/cc	2.24	2.25	-

* Data specified by Contractor.

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DETERMINATION OF RATE OF SPREAD TACK COAT

Date. :22-01-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing :22-01-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2029	0.2029
Intial Wt of empty Plate (b)	Kg	1.627	1.628
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.686	1.687
Weight of Prime/Tack Coat (d=c-b)	Kg	0.0590	0.0590
Rate of spread of prime /tack coat	kg/Sq.m	0.291	0.291
Average	kg/Sq.m	0.291	
Specified Limit	kg/Sq.m	0.25 Kg/sq.m	

* Data specified by Contractor

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

DETERMINATION OF RATE OF SPREAD TACK COAT

Date. :02-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing :02-02-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2027	0.2027
Intial Wt of empty Plate (b)	Kg	1.627	1.628
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.685	1.687
Weight of Prime/Tack Coat (d=c-b)	Kg	0.0580	0.0590
Rate of spread of prime /tack coat	kg/Sq.m	0.286	0.291
Average	kg/Sq.m	0.289	
Specified Limit	kg/Sq.m	0.25 Kg/sq.m	

* Data specified by Contractor

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬೆಂಗಳೂರು, ಬೆಂಗಳೂರು-26

DETERMINATION OF RATE OF SPREAD TACK COAT

Date. :07-02-2023

Client Name : Executive Engineer, Bytarayanapura Division,No 2152/20,Defence Colony,Sahakara Nagara,Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop.Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout,Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Date of testing :07-02-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2028	0.2028
Intial Wt of empty Plate (b)	Kg	1.629	1.626
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.687	1.686
Weight of Prime/Tack Coat (d=c-b)	Kg	0.0580	0.0600
Rate of spread of prime /tack coat	kg/Sq.m	0.286	0.296
Average	kg/Sq.m	0.291	
Specified Limit	kg/Sq.m	0.25 Kg/sq.m	

* Data specified by Contractor

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ಬಿ.ಬಿ.ಎಂ.ಪಿ ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-24